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International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: <b>A61F 2/42</b>	<b>A1</b>	(11) International Publication Number: <b>WO 98/19637</b>
		(43) International Publication Date: 14 May 1998 (14.05.98)
<p>(21) International Application Number: <b>PCT/US97/19894</b></p> <p>(22) International Filing Date: <b>3 November 1997 (03.11.97)</b></p> <p>(30) Priority Data: <b>08/743,717</b>      <b>6 November 1996 (06.11.96)</b>      <b>US</b></p> <p>(71) Applicant (for all designated States except US): <b>ASCENSION ORTHOPEDICS, INC. [US/US]; Suite C-140, 8200 Cameron Road, Austin, TX 78754-3823 (US).</b></p> <p>(72) Inventors; and (73) Inventors/Applicants (for US only): <b>KLAUITTER, Jerome, J. [US/US]; 3 Humboldt Lane, Austin, TX 78746 (US). OGILVIE, William, F. [US/US]; 2408 West 12th Street, Austin, TX 78703 (US).</b></p> <p>(74) Agents: <b>SAMPLES, Kenneth, H. et al.; Plich, Even, Tabin &amp; Flannery, Suite 900, 135 South LaSalle Street, Chicago, IL 60603-4277 (US).</b></p>		<p>(81) Designated States: <b>CA, JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</b></p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>
<p>(54) Title: <b>METACARPAL-PHALANGEAL JOINT REPLACEMENT</b></p> <div data-bbox="349 1144 1291 1480"> </div> <p>(57) Abstract</p> <p>A joint prosthesis for replacement of the metacarpal-phalangeal (MP) joint (19) of a human finger which includes a metacarpal element (13) with a stem (15) for reception into the medullary cavity of the metacarpal bone (11) and a generally ball-shaped articular head (17) and a phalangeal element (14) with a stem (16) for reception into the medullary cavity of the proximal phalangeal bone (12) and a generally socket-shaped head (18) which conforms to the ball-shaped head (17). The metacarpal element's (13) articular head (17) has reliefs (51, 52) located on each of its two lateral sides so as to provide a generally free path for the collateral ligaments (43, 44). The phalangeal element's (14) articular head (18) has a dorsal protrusion (71) that resists subluxation-dislocation of the phalangeal bone and grooves (31, 32) in its concave surface (22) which allow biological fluids access to the inner regions of the articulation contact surfaces (21, 22). The proximal face of the head (18) may be tangent to a plane (P), or the face of the head (118) may be tangent to a cylinder of circular cross section to provide greater capture and joint stability.</p>		